

Computer Science & Innovation



Why Computer Science & Innovation?

While studying Computer Science and Innovation you will use new technologies – and learn about networking and programming innovation – to solve problems in an ever-changing world.

The Computer Science and Innovation degree program offers you technical and professional preparation for careers in computer science or to transfer to a 4-year degree program. All degree candidates study core computer science competencies including various programming, Internet, networking and operating system courses.

Degree & Certificate Options

This program offers one degree and one certificate:

- Computer Science eXtended Reality (XR) Associate of Science (A.S.)
- Programming Certificate.

Program Goals

In each year of the Computer Science and Innovation degree program, students are presented with a personalized, student-centered learning program focused on innovative workplace and consumer applications. The program focuses on emerging technology, such as mobile devices and devices not normally associated with Computer Science, such as automobiles, household appliances and other devices including future computerized devices.

Admission Requirements

Applicants for admission to the Computer Science and Innovation degree program must comply with general college admission requirements. You must also provide a High School transcript or participate in an interview with an MCC Admissions Counselor.

Most physical requirements necessary for this program can be accommodated with appropriate documentation.

Potential Jobs

- Web Developer
- Software Engineer
- Networker
- Mobile App Developer
- IoT Developer
- Web Designer

Potential Salary*

Computer Science remains one of the fastest growing fields, with a projected shortage of qualified job candidates for programmers, networkers, database professionals and web designers.

There is a wide range of jobs in the computer science and innovation industry. See below for the average annual salary range in central NH for a **Software or App Developer**.

ENTRY LEVEL	MID-RANGE	EXPERIENCED
\$74,003	\$124,106	\$185,864

*Career Coach 2024, mccnh.lightcastcc.com

Transfer Opportunities

- Plymouth State University
- Rivier University
- UNH
- ...and many more!

This degree creates a stepping stone for transfer to Computer Science and Innovation four-year degrees.

See your MCC advisor for details.

mccnh.edu

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Degree & Certificate Requirements

Computer Science & Innovation

Degree Program - First Year

First Year	Fall Semester	TH	LAB	CR
CIS105M	Introduction to Computer Science	2	2	3
ENGL110XM or ENGL110M	College Composition I with Corequisite or College Composition I	4	0	4
MATH155M	College Algebra with Trigonometry	4	0	4
FYE100M	MCC Essentials	1	0	1
	Apps Elective (<i>CIS107M</i> or <i>CIS108M</i>)	2	2	3
	Total	13	4	15
First Year	Spring Semester	TH	LAB	CR
	Physics Elective - Choose one: (<i>PHYS135M</i> , <i>PHYS210M</i>)	3	3	4
	English Literature/Philosophy Elective choose any English Literature course or <i>ENGL213M</i> , <i>ENGL214</i> , or <i>PHIL240M</i>)	3	0	3
	Programming Language Elective (<i>CIS117M</i> , <i>CIS118M</i> , <i>CIS126M</i> or <i>CIS158M</i>)	2	2	3
	CS Technical Elective (<i>excludes CIS110M</i>)	2	2	3
	Social Science Elective	3	0	3
	Total	13	7	16

Degree Program - Second Year

Second Year	Fall Semester	TH	LAB	CR
CIS210M	Data Structures and Elementary Algorithms	3	3	4
CIS220M	Object-Oriented Programming	2	2	3
CSCN210M	Computer Science in Action I - Technology Innovation	3	3	4
MATH171M	Pre-Calculus	4	0	4
	Total	12	8	15
Second Year	Spring Semester	TH	LAB	CR
CSCN220M	Entrepreneurship in Computer Science	3	3	4
CSCN225M	Computer Science in Action II - Quality Assurance & Security	3	3	4
MATH170M	Discrete Mathematics	4	0	4
ACCT113M	Intro to Accounting and Financial Reporting I	3	0	3
	Computer Science Elective (<i>CSCN290M</i> or <i>CIS291M</i>)	2	2	3
	Total	15	8	18
	Total Credits - 64			



More information about this program is available on our website: www.mccnh.edu/academics/programs/computer-science-and-innovation/

Programming Certificate

The Programming certificate is designed to prepare you for careers in computer programming and provides the skills necessary for entry-level positions in the field. Earning it also allows you to transfer the credits into one of the other MCC Computer Science degree programs:

		TH	LAB	CR
CIS105M	Introduction to Computer Science	2	2	3
	Apps Elective - choose one: <i>CIS107M</i> , <i>CIS108M</i>	2	2	3
	Computer Science Elective - choose one: <i>CIS118M</i> , <i>CIS126M</i> , <i>CIS148M</i> , <i>CIS158M</i> , <i>CIS274M</i>	2	2	3
	Computer Science Elective - choose one: <i>CIS118M</i> , <i>CIS126M</i> , <i>CIS148M</i> , <i>CIS158M</i> , <i>CIS274M</i>	2	2	3
CIS210M	Data Structures and Elementary Algorithms	3	3	4
CIS220M	Object Oriented Programming	2	2	3
	Total Credits - 19			

Acquired Skills

Students who graduate from this program will be able to:

- Explain the term "Internet of Things."
- Demonstrate proficiency in the foundation of programming languages, object-oriented databases and networking.
- Explain the need to develop non-traditional computer application for use on a mobile platform or other emerging technology.
- Demonstrate the need for Software Quality Assurance.
- Demonstrate differences between manual and automated software testing.
- Demonstrate methods of creating secure code on various platforms.
- Demonstrate expertise in one area of computer science: programming, data structures, databases or networking.
- Demonstrate proficiency in state-of-the-art technology within the student's area of concentration.
- Demonstrate problem-solving and critical thinking skills.
- Demonstrate knowledge in social, legal and ethical implications for computer science.
- Create a stepping-stone for transfer to a 4-year college.
- Explain the necessity for a commitment to life-long learning.

All courses and degree requirements are subject to change. For the most current information on MCC programs, see mccnh.edu/programs.

